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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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|-----------------|-------------|----------------------|---------------------|------------------|

10/044,045

01/11/2002

Ahmad Reza Kashani

UVD 0298 PA

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12/21/2005

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EXAMINER

PENDLETON, BRIAN T

ART UNIT

PAPER NUMBER

2644

DATE MAILED: 12/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------|-------------------------------------|--|
| Office Action Summary | Application No. 10/044,045 | Applicant(s) KASHANI, AHMAD REZA | |
| | Examiner Brian T. Pendleton | Art Unit 2644 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-65 is/are pending in the application.
- 4a) Of the above claim(s) 8-16, 25-28 and 42-65 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 34-41 is/are allowed.
- 6) ☒ Claim(s) 1-7, 17-22 and 29-33 is/are rejected.
- 7) ☒ Claim(s) 23 and 24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Claims 8-16, 25-28, and 42-65 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 8/8/05.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7, 17-22, 29, and 31-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Fischer et al, US Patent 5,748,748. In figure 1, Fischer et al disclose a vehicle body 14 (enclosure defining a plurality of low frequency acoustic modes), microphone 40 (acoustic wave sensor), accelerometer 28 (motion detector), loudspeaker 44 (acoustic wave actuator), whereby the first electronic feedback loop is the electronic path through operation detection unit 18 and selector device 36. The second electronic feedback loop is the electronic path through tripping device 39. Claims 1, 3, 17, and 33 are met. Regarding claims 2, inherently there are low frequency structural vibration acoustic modes in a vehicle during its movement. As to claims 4, 5, the motion sensor picks up the low frequency acoustic modes produced by the vibration of the vehicle body 14 and sends an electric signal to operation detection unit 18. As to claims 6 and 7,

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the motion sensor meets the limitations. Per claim 18, microphone 40 is located inside the vehicle body 14. Regarding claims 19-22, as similar to the accelerometer 28, the microphone 40 is capable of producing an sensor signal representative of low frequency acoustic modes and sending an electric signal to tripping device 39. As to claim 29, the microphone 40 and loudspeaker 44 are collocated within the vehicle body 14. Regarding claim 31, the loudspeaker 44 is configured to send a secondary vibration S which is opposite in phase of the primary oscillation P calculated by selector device 36. Per claim 32, there is a change of air volume velocity produced by the loudspeaker 44.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer et al in view of Fuller, US Patent 4,715,559. Fischer et al do not disclose that the acoustic wave actuator and acoustic wave sensor are positioned to correspond to the location of the acoustic anti-node of a target acoustic mode within the vehicle. Fuller discloses an apparatus for noise reduction in an enclosure comprising a plurality of microphones 26 and actuators 24. As taught in column 8 lines 21-37, the microphones 26 are located to detect acoustic modes. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Fischer et al by positioning the microphone 40 with regard to a target acoustic mode, as taught by Fuller, for the purpose of canceling a particular noise component.

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Allowable Subject Matter

Claims 34-41 are allowed.

Claims 25-28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian T. Pendleton whose telephone number is (571) 272-7527. The examiner can normally be reached on M-F 7-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571) 272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brian T. Pendleton
Primary Examiner
Art Unit 2644



btp